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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/684,044 10/06/2000 Eilaz Babaev 24149-11 3047 EXAMINER 7590 09/15/2004 George Likourezos THOMPSON, MICHAEL M Carter Deluca Farrell & Schmidt LLP ART UNIT PAPER NUMBER 445 Broad Hollow Road Suite 225 3763 Melville, NY 11747

DATE MAILED: 09/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

			In
	Application No.	Applicant(s)	
·	09/684,044	BABAEV, EILAZ	•
Office Action Summary	Examiner	Art Unit	
	Michael M. Thompson	3763	
The MAILING DATE of this communication a	ppears on the cover sheet wit	h the correspondence add	ress
Period for Reply	IVIC CETTO EVDIDE 2 M/	ONTH(S) EDOM	
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a re If NO period for reply is specified above, the maximum statutory perio Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	I. 1.136(a). In no event, however, may a re ply within the statutory minimum of thirty d will apply and will expire SIX (6) MONT ute, cause the application to become AB	eply be timely filed  y (30) days will be considered timely.  THS from the mailing date of this cor  ANDONED (35 U.S.C. § 133).	
Status			•
1) Responsive to communication(s) filed on 25	August 2004.		
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Th	nis action is non-final.		
3) Since this application is in condition for allow	ance except for formal matte	ers, prosecution as to the	merits is
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D.	. 11, 453 O.G. 213.	
Disposition of Claims			
4) Claim(s) <u>1-43,50-53 and 59</u> is/are pending ir	the application.		•
4a) Of the above claim(s) 2,3,5,7-13,15-20,2		is/are withdrawn from cor	isideration.
5) Claim(s) is/are allowed.			
6) Claim(s) <u>1,4,6,14,21,23,25,32,40-42,50-52 a</u>	nd 59 is/are rejected.		
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and	or election requirement.		
Application Papers			
9)☐ The specification is objected to by the Exami	ner.	•	
10)☐ The drawing(s) filed on is/are: a)☐ ad	ccepted or b) objected to I	by the Examiner.	
Applicant may not request that any objection to the	-, ,		
Replacement drawing sheet(s) including the corre			
11)☐ The oath or declaration is objected to by the	Examiner, Note the attached	Office Action of form P is	J-152.
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreignal All b) Some * c) None of:	gn priority under 35 U.S.C. §	119(a)-(d) or (f).	
1. Certified copies of the priority docume	nts have been received.		
2. Certified copies of the priority docume	nts have been received in A	pplication No	
3. Copies of the certified copies of the pr		received in this National S	Stage
application from the International Bure	, , , , , , , , , , , , , , , , , , , ,		
* See the attached detailed Office action for a li	st of the certified copies not	receivea.	
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Attachment(s)	4) [] Intonii 0	Summany (DTO 412)	
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> </ol>	Paper No(s	Summary (PTO-413) S)/Mail Date	
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date <u>06-01-2004</u> .	98) 5) Notice of Ir 6) Other:	nformal Patent Application (PTO 	-152)

Application/Control Number: 09/684,044 Page 2

Art Unit: 3763

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1, 4, 6, 14, 50-52, and 59 are rejected under 35 U.S.C. 102(b) as being anticipated by Durley, III. (4,085,893). Durley, III. teaches a nozzle for ultrasound production of a sprayed liquid comprising a main body (Figures 1, 7, and 10) wherein the main body is close to the free distal end of the ultrasound transducer with an opening or dispensing orifice is at the most distal end of the transducer. He teaches a valve (170) controlling the flow rate of the solution being delivered to the transducer, the main body being connected to at least one reservoir (column 11) for delivering an atomized solution.

### Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 21, 23, 25, 32, and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Durley, III. Durley, III. teaches all of the limitations of the claims except for explicitly designating the nozzle is made of one piece and whether or not the nozzle is sterile, sterilizable, or disposable, a reservoir on top or on the side, or a rigidly connected reservoir. At

Art Unit: 3763

the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to provide a rigidly connected reservoir or a reservoir on the top or side of the device because Applicant has not disclosed that positioning the reservoir on the top or side or providing a rigidly connected reservoir provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with a port on the bottom side or any side and a flexibly connected reservoir because the ability of the opening to convey liquid to the ultrasound transducer tip is not affected by the reservoirs location or rigidity. Therefore, it would have been an obvious matter of design choice to modify Durley, III. To obtain the invention as specified in the claims.

It would have further been obvious to one having ordinary skill in the art, at the time the invention was made to make the nozzle as one piece, since it has been held that one-piece construction, in place of separate elements fastened together, is a design consideration within the skill of the art. In re Kohno, 391 F.2d 959, 157 USPQ 275 (CCPA 1968); In re Larson, 340 F.2d 965, 144 USPO 347 (CCPA 1965). Furthermore, it is well known that dental tools are expected to be sterile and sterilizable while the disposability of an apparatus is delegated to the practitioner.

## Response to Arguments

5. Applicant's arguments filed June 1, 2004 have been fully considered but they are not persuasive. The Examiner respectfully disagrees with Applicant's arguments that the Durley, III device does not teach the water or other liquid directed at the most distal end and the devices being connected to or in fluid communication with the reservoir or holder for holding liquid. On

Art Unit: 3763

the contrary Figure 10 shows the water being directed to the most distal end of the device at the distal tip. If the flow where even higher the water would exit the tube or pipe (16) toward the distal direction in an even greater amount. Durley, III. also teaches the transducer including the tail end mass (26) and front end mass (22) which includes vibratory member (14) constituting the "ultrasound transducer tip." He further teaches that the device may "be used in all other types of humidifiers ... is well adapted for use in portable unit ... the humidifier can readily be adapted for use with any collapsible water reservoir." It is clear from these statements that the device may be used with and may be connected to a reservoir. Furthermore, the device may be contained or coaxially placed within a main body/holder of a device that supplies the reservoir, etc. to expel the fluid within the reservoir wherein the transducer is separable from the main body/holder.

#### Contacts

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Michael Thompson whose telephone number is (703) 305-1619. The Examiner can normally be reached on Monday through Friday from 9 am to 5 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Primary, Brian Casler, can be reached on (703) 308-3552. The official fax phone number for all submissions to the organization where this application or proceeding is assigned is (703) 872-

9306.

Michael M. Thompson Patent Examiner

NICHOLAS D. LUCCHESI SUPERVISORY PATER: EXAMINER TECHNOLOGY CENTER 3700

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September 13, 2004